

REMARK

Request for Reconsideration

Applicant has carefully considered the matters raised by the Examiner in the outstanding Office Action but remains of the opinion that patentable subject matter is present.

Applicant respectfully requests reconsideration of the Examiner's position based on the above amendments to the claims and the following remarks.

Claims Status

Claims 1-13 have been canceled and Claims 14-35 have been presented for further prosecution. Support for the new Claims is as follows:

<u>New Claim</u>	<u>Support in Specification</u>
14	p. 4-5, bridging paragraph p. 5, second paragraph p. 9, third paragraph
15, 24	p. 4, first paragraph
16, 25	p. 5, fourth paragraph
17, 26	p. 5-6, bridging paragraph

<u>New Claim</u>	<u>Support in Specification</u>
18, 27	p. 6, first paragraph
19, 28	p. 6, second paragraph
20-22, 29-31	p. 7, first paragraph
23	p. 4-5, bridging paragraph p. 5, third paragraph p. 9, third paragraph
32	p. 4, first paragraph p. 5, second paragraph p. 9, third paragraph
33,35	p. 5, first paragraph
34	p. 4, first paragraph p. 5, third paragraph p. 9, third paragraph

Present Invention

One of the novel aspects of the present Invention is that the ink employs either a tertiary amine compound or a photo polymerizable tertiary amine compound. It will be seen that Claims 14-22 and Claims 32 and 33 employ the tertiary amine compound while Claims 23-31, 34 and 35 employ a photo polymerizable tertiary amine monomer.

By using either the tertiary amine compound or the photo polymerizable tertiary amine monomer, curing shrinkage of the ink is suppressed, see page 13, second and fourth paragraphs.

Respectfully, none of the references teach or suggest such a combination and it is submitted that the ink, as claimed herein, is patentable over the art.

Claim Rejections

In the Office Action, the Examiner had applied the references of Marshall, both the European Patent Application and the U.S. equivalent, Koitabashi, Takami, and Ushirogouchi.

The Marshall references have been cited to teach a solventless ray curable ink having up to 70% mono functional monomer, and up to 10% trifunctional monomer. The Examiner recognized that Marshall did not teach the tertiary amine compound or the photo polymerizable tertiary amine monomer. For these two limitations, the Examiner had turned to Koitabashi. Specifically, the Examiner pointed to Column 13, lines 30-40 and Column 16, lines 35-65 of Koitabashi.

Applicant traverses this combination on two grounds. First, it is inappropriate to combine Koitabashi with Marshall because they are non-analogous references.

Second, even if the two were combined, they would not result in the present Invention.

There are a number of reasons why the two are non-analogous references. First, Marshall is directed to a ray curable ink, while Koitabashi is not. Koitabashi teaches using one or two inks in a treating liquid, see the Abstract. Thus, Koitabashi is not directed to ray curable ink but rather to an ink which reacts through normal chemical process.

Second, Koitabashi is directed to an ink that uses a solvent whereas Marshall is a solventless ink. As brought out at Column 3, starting at line 40 of Koitabashi, his ink employs an aqueous medium. In fact, Koitabashi teaches that the tertiary amine can be used as a cationic polymer dispersant, see Column 13, line 31 and that this cationic dispersant is used in an aqueous medium, see Column 12, lines 57-64. Furthermore, at Column 16, lines 30-65, Koitabashi is teaching that tertiary amines is used in the treatment liquid. The treatment liquid is a water based

solution, see, for example, Column 31, lines 53-64. This treating liquid is applied on top of the ink to cause a chemical reaction, see Column 5, lines 45 plus. This emphasizes that Koitabashi is directed to an ink that uses a solvent and not a solventless ink.

Thus, Applicant submits that it is inappropriate to combine Koitabashi with Marshall because (1) Marshall is directed to a ray curable ink while Koitabashi is directed to an ink that is formed through a chemical reaction; and (2) Marshall is directed to a solventless ink while Koitabashi is directed to an ink that uses a solvent and, especially, water. Respectfully, one of skill in the art would not combine the teachings of Marshall with Koitabashi since the two are directed to different fields.

Applicants also submit that, even if one were to combine the teaching of Koitabashi with the teaching of Marshall, one would not arrive at the present Invention. The reason for this is that Koitabashi teaches that the tertiary amine is employed in an aqueous solution or medium as a dispersant. Thus, to use the teachings of Koitabashi, one would have to employ a solution which contains water. This is in direct contrast with the present Invention and

Marshall where the inks are solventless. The combination of Marshall and Koitabashi do not yield a solventless ink.

Furthermore, it is submitted that the purpose for which the tertiary amine compound is used in the present Invention is dramatically different than the purpose for which the tertiary amine compound is used in Koitabashi. In Koitabashi, the tertiary amine is used as a dispersant, see Column 13, line 31 and Column 16, lines 30-35. In contrast, the present Invention uses the amine compound to suppress curing as noted on page 13 in the second and fourth paragraph. Thus, it is submitted that one of skill in the art is not directed by Koitabashi to add the tertiary amine compound to an ink and, especially, a ray curable solventless ink, in order to reduce the curing.

Respectfully, the Examiner is using nothing more than hindsight to pick one element of Koitabashi, use it out of context and apply it in a reference which is totally unrelated to the teachings of Koitabashi. It is wholly unreasonable for one of skill in the art to choose the tertiary amines out of Koitabashi and add it to the solventless ink of Marshall because such would destroy the teachings of Koitabashi. Koitabashi teaches a specific

purpose for his tertiary amines, namely, as a dispersant in an aqueous medium. There is no water in the present Invention nor is there water in Marshall, thus there is no need for the dispersant of Koitabashi in Marshall.

Respectfully, it is inappropriate to combine Marshall with Koitabashi and, even if one were to combine Koitabashi with Marshall, one would not arrive at the present Invention.

Turning to the other references cited by the Examiner, neither Takami nor Ushirogouchi teach or suggest the photo polymerizable ink of the present Invention and it is respectfully submitted that all four of the cited references, taken alone or in combination, do not result in the present Invention.

Conclusion

In view of the foregoing, it is respectfully submitted that the Application is in condition for allowance and such action is respectfully requested.

Should any extensions of time or fees be necessary in order to maintain this Application in pending condition, appropriate requests are hereby made and authorization is given to debit account # 02-2275.

Respectfully submitted,

LUCAS & MERCANTI, LLP

By:

Donald C. Lucas
Donald C. Lucas, Reg.31,275
(Attorney for Applicant(s)
475 Park Avenue South
New York, New York 10016
Tel. # (212) 661-8000

DCL/mr

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